

# STEPP III-UX

Automotive Vehicle Location solution (AVL)

High Sensivity Satellite Navigation (50 channel u-blox 5 engine)

AGPS capable

Communication via Quad Band GSM

SMS, Data, GPRS, TCP/IP, Email

Fully customizable behaviour

Car Security and Recovery

Thief Alert / Motion Detection

Online Tracking

Drivers Logbook/History

Territory Management / Geofencing

Remote administration & firmware update

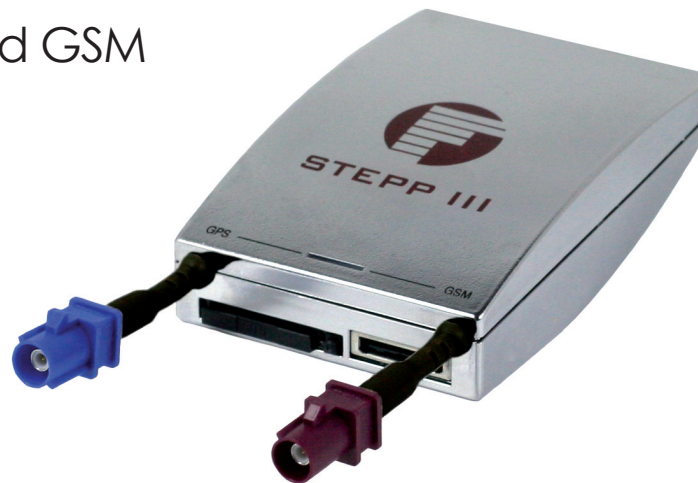
Fully approved ( FCC, PTCRB, e1, CE )

Additional IO Ports

Motion sensor

Options: CAN Interface

Backup battery



## The FALCOM STEPP III-UX

is a free configurable smart tracking device, which can be fully adapted to user requirements. Its main purpose is to act as a mobile client for various system solutions like AVL, fleet management, vehicle security and recovery. The device can operate fully autonomously and is able to interact using sensors and actuators.

It can be adapted to existing tracking solutions and can be easily configured to gather or exchange relevant information with servers or users directly. An often used example is to send status reports or verbose alert messages directly via SMS to users and/or via TCP to tracking servers.

Users benefit most from combining comfort and security aspects.

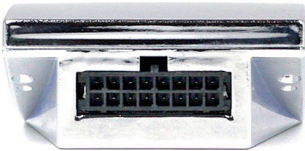
Drivers logbook and data logging functionalities are combined in the Falcom history feature.

Geofencing can be used to report violations of predefined routes or areas (for example if a car enters or leaves a specific area/ no-go-zones).

All of these features are perfectly integrated in a device concept, which significantly reduces time-to-market and provides low cost tracking and security solutions.

## Software features

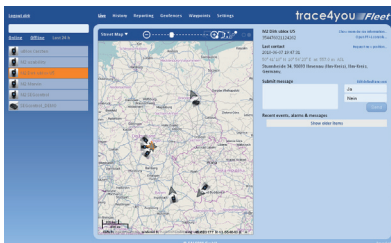
- PFAL commands for full control
- Intelligent and flexible alarm system, suitable for most applications
- Customizable device messages
- Easy to combine with most digital and analogue sensors
- Drivers Logbook / History
- Geofencing, distance calculation
- Trip management
- Local and remote communication
- Optional
  - Encrypted communication
  - Security authentication
- Remote access
  - Status reports / tracking
  - Commands
  - Configuration
  - Firmware update



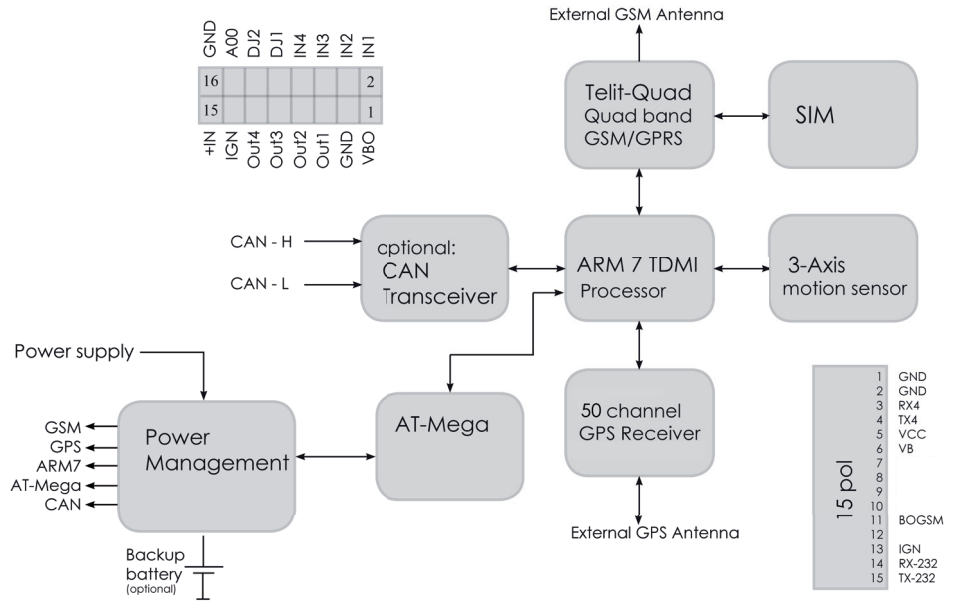
## Applications

- Real time online tracking
- Fleet management / monitoring
- Security / emergency services
- Real time satellite navigation
- Territory management
- Personalized drivers logbook
- Route verification
- Trip management / distance calculations
- Theft protection
- Toll collection / pay as you drive
- Compatible with FALCOM Trace4you Server solution

## trace4you



## Block diagram



## Technical specification

GSM core	Physical characteristics
TELIT GE864-Quad module	Dimensions (LxWxH): 55 x 88 x 22 mm
850/900/1800/1900 MHz	Weight: approx. 120 g
GPRS class 10, class B	Temperature range
TCP/IP (accessible via PFAL commands)	Operating: -40 °C to +85 °C
GPS core	Storage: -40 °C to +90 °C
50 channel u-blox 5 engine	GSM**: -40 °C to +85 °C
A-GPS online/offline support	Battery option: -20 °C to +60 °C
Protocols: NMEA, GGA, GGL, GSA, GSV, RMC, WGS-84	Charging: 0 °C to +45 °C
Accuracy: Position < 2.5 m	Motion sensor
SBAS < 2 m	3-axis motion sensor
Acquisition: TTF hot start: < 1 s average	Interfaces
TTF warm start: < 29 s average	16 pin Molex 43045-1609
TTF cold start: < 29 s average	• 8 inputs
Sensitivity: Acquisition: -160 dBm	- 4 configurable inputs (digital or analogue)
Tracking: -160 dBm (12 dBHz)	- 2 digital inputs (used for CAN feature)
Cold start: -144 dBm	- IGN, DiWu, power in/out
Limits: Velocity: 500 m/s (972 knots)	• 4 digital outputs (open collector 100 mA)
Altitude: 50.000 m	15 pin AMP 5-558556-1
	- RS232 (RX,TX V24 level)
	- RS232 (RX,TX TTL level)
Processor core	SIM card reader for 1,8/3V SIM cards
ARM7/TDMI	GPS RF connector 50 Ohm FAKRA/Radiall
Memory: 2 MB / 512 kB	GSM RF connector 50 Ohm FAKRA/Radiall
Electrical characteristics	3 programmable LEDs
Power: +10,8 V to + 32 V DC	CAN Interface*
Backup battery*	

\* optional available

\*\* The GSM/GPRS module is fully functional (-20 °C to + 55 °C meets the 3GPP specifications).

Note: Specifications and information given in this document are subject to change by FALCOM without notice. For latest product information see [www.falcom.de](http://www.falcom.de)